



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

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| Name(s) Kevin R. Kocher | Project Number S1007 |
| Project Title The Beat Goes On | |
| Abstract Objectives/Goals The objective of this experiment was to determine whether or not the genre/tempo of music (calm, upbeat, intense) had an effect on heart rate and blood pressure. Methods/Materials Three test subjects (ages 14, 44, and 53) sat for two minutes and had their resting heart rate/blood pressure recorded. Each subject then listened to three minutes of clam music through head phones, then had their heart rate/blood pressure recorded while they continued to listen to the music. This process was repeated for the upbeat and intense music and the experiment was run for two more trials. Results In general, the test subjects' blood pressure dropped with the calm music and had a somewhat increase with the upbeat or intense music. Test subject 1's heart rate (during trials 1 and 3) rose greatly as music intensified, but the other subjects did not react very much. Conclusions/Discussion Calm music, though not very effective in reducing heart rate, can help lower blood pressure, which can reduce the risk of heart problems. Intense music, though not consistent, can cause heart rate and blood pressure to rise. | |
| Summary Statement My project is about determining the effect music has on heart rate and blood pressure. | |
| Help Received mother helped cut background paper | |